

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (canceled).

Claim 2 (currently amended): The method of claim 4~~1~~, wherein running spanning tree on the data-stitch blocks the data-stitch.

Claim 3 (canceled).

Claim 4 (previously presented): A method for preventing a layer-2 forwarding loop within a data-stitching network element, the method comprising:
 assigning a new network circuit to the data-stitching network element;
 determining that the new network circuit is assigned a VLAN that was previously assigned to an existing network circuit;
 running spanning tree on a data-stitch created by the new network circuit;
 removing a network circuit from the data-stitching network element;
 determining that the removed network circuit was assigned a VLAN that is also used by another network circuit;
 removing spanning tree from the other network circuit; and
 determining that the another network circuit had spanning tree run thereon.

Claim 5 (original): The method of claim 4, wherein said removing will be performed only in response to a determination that the another network circuit had spanning tree run thereon.

Claim 6 (previously presented): A method for preventing a layer-2 forwarding loop within a data-stitching network element, the method comprising:
assigning a new network circuit to the data-stitching network element;
determining that the new network circuit is assigned a VLAN that was previously assigned to an existing network circuit;
running spanning tree on a data-stitch created by the new network circuit;
removing a network circuit from the data-stitching network element;
determining that the removed network circuit was assigned a VLAN that is also used by another network circuit;
removing spanning tree from the other network circuit; and
determining if the removed network circuit had spanning tree run thereon.

Claim 7 (original): The method of claim 6, wherein said removing will be performed only in response to a determination that the removed network circuit did not have spanning tree run thereon.

Claim 8 (original): The method of claim 6, wherein said determining that the removed network circuit was assigned a VLAN that is also used by another network circuit will be performed only in response to a determination that the removed network circuit did not have spanning tree run thereon.

Claim 9 (original): The method of claim 4, further comprising determining if the removed network circuit had spanning tree run thereon.

Claim 10 (original): The method of claim 9, wherein said determining that the another network circuit had spanning tree run thereon will be performed only in response to a determination that the removed network circuit did not have spanning tree run thereon.

Claim 11 (currently amended): A computer program embodied on a computer readable medium for preventing a layer-2 forwarding loop within a data-stitching network element, the computer program comprising:

- a code segment for assigning a new network circuit to the data-stitching network element;

- a code segment for determining that the new network circuit is assigned a VLAN that was previously assigned to an existing network circuit; and

- a code segment for running spanning tree on a data-stitch created by the new network circuit;

- a code segment for removing a network circuit from the data-stitching network element;

- a code segment for determining that the removed network circuit was assigned a VLAN that is also used by another network circuit;

- a code segment for removing spanning tree from the other network circuit; and

- a code segment for determining if the removed network circuit had spanning tree run thereon.

Claim 12 (previously presented): A method for ensuring that no layer-2 forwarding loops will be allowed within a telecommunications network, the method comprising:

- defining a new network circuit for a network element;

- assigning a VLAN for the new network circuit, comprising:

- assigning a test VLAN for the new network circuit;

- determining assignment of VLANs to other network circuits associated with the network element;
- determining if the test VLAN intersects entirely with any of the other assigned VLANs;
- determining if the test VLAN is distinct from all the other assigned VLANs; and
- accepting the test VLAN in response to
 - a determination that the test VLAN intersects entirely with any of the other assigned VLANs, or
 - a determination that the test VLAN is distinct from all the other assigned VLANs;
- running spanning tree on links of the network element associated with the new network circuit and assigned the VLAN; and
- if the network element is a data-stitching network element;
 - determining that the VLAN assigned to the new network circuit was previously assigned to an existing network circuit, and
 - running spanning tree on a data-stitch created by the new network circuit.

Claim 13 (canceled).

Claim 14 (currently amended): A system for ensuring that no layer-2 forwarding loops will be allowed within a telecommunications network, the system comprising:

- means for defining a new network circuit for a network element;
- means for assigning a VLAN for the new network circuit, comprising:
 - means for assigning a test VLAN for the new network circuit;
 - means for determining assignment of VLANs to other network circuits associated with the network element;

means for determining if the test VLAN intersects entirely with any of the other assigned VLANs;

means for determining if the test VLAN is distinct from all the other assigned VLANs; and

means for accepting the test VLAN in response to

a determination that the test VLAN intersects entirely with any of the other assigned VLANs, or

a determination that the test VLAN is distinct from all the other assigned VLANs;

means for running spanning tree on links of the network element associated with the new network circuit and assigned the VLAN; and

a data-stitching network element including:

means for determining that the VLAN assigned to the new network circuit was previously assigned to an existing network circuit, and

means for running spanning tree on a data-stitch created by the new network circuit.

Claim 15 (canceled).

Claim 16 (previously presented): A method for preventing a data-stitch within a data-stitching network element from inadvertently being blocked, the method comprising:

removing a network circuit from the data-stitching network element;

determining that the removed network circuit was assigned a VLAN that is also used by another network circuit;

removing spanning tree from a data-stitch associated with the other network circuit; and

determining that the removed network circuit did not have spanning tree run thereon.

Claim 17 (previously presented): A method for preventing a data-stitch within a data-stitching network element from inadvertently being blocked, the method comprising:

- removing a network circuit from the data-stitching network element;
- determining that the removed network circuit was assigned a VLAN that is also used by another network circuit;
- removing spanning tree from a data-stitch associated with the other network circuit; and
- determining that the other network circuit had spanning tree run thereon.

Claim 18 (previously presented): A method for ensuring that no paths within a telecommunications network will inadvertently be blocked, the method comprising:

- removing a new network circuit from a network element;
- disassociating links of the network element from a VLAN assignment associated with the removed network circuit; and
- if the network element is a data-stitching network element;
 - determining that the removed network circuit was assigned a VLAN that is also used by another network circuit,
 - determining that the another network circuit had spanning tree run thereon; and
 - removing spanning tree from a data-stitch associated with the other network circuit.

Claim 19 (previously presented): A network device for preventing formation of layer-2 forwarding loops within a telecommunications network, the network device comprising:

- memory;

one or more network interfaces; and
a processor configured to :
define a new network circuit for the network device;
assign a VLAN for the new network circuit;
determine that the VLAN assigned to the new network circuit was
previously assigned to an existing network circuit, and
run spanning tree on a data-stitch created by the new network
circuit;
wherein said processor is further configured to run spanning tree on links
of the network device associated with the new network circuit and assigned the VLAN.

Claim 20 (previously presented): A network device for preventing
formation of layer-2 forwarding loops within a telecommunications network, the network
device comprising:

memory;
one or more network interfaces; and
a processor configured to:
define a new network circuit for the network device;
assign a VLAN for the new network circuit;
determine that the VLAN assigned to the new network circuit was
previously assigned to an existing network circuit, and
run spanning tree on a data-stitch created by the new network
circuit;
wherein said processor assigns a VLAN for the new network circuit by:
assigning a test VLAN for the new network circuit;
determining assignment of VLANs to other network circuits associated
with the network device;
determining if the test VLAN intersects entirely with any of the other
assigned VLANs;

determining if the test VLAN is distinct from all the other assigned VLANs; and
accepting the test VLAN in response to
a determination that the test VLAN intersects entirely with any of the other assigned VLANs, or
a determination that the test VLAN is distinct from all the other assigned VLANs.

Claim 21 (canceled).

Claim 22 (original): The network device of claim 19, wherein said processor is further configured to:
remove a network circuit from the network device;
determine that the removed network circuit was assigned a VLAN that is also used by another network circuit; and
remove spanning tree from a data-stitch associated with the other network circuit.

Claim 23 (original): The network device of claim 22, wherein said processor is further configured to disassociate links of the network device from a VLAN assignment associated with the removed network circuit.

Claim 24 (previously presented): A network device for preventing paths within a telecommunications network from inadvertently being blocked, the network device comprising:

memory;
one or more network interfaces; and
a processor configured to:
remove a network circuit from the network device;

determine that the removed network circuit was assigned a VLAN that is also used by another network circuit,

determine that the another network circuit had spanning tree run thereon; and

remove spanning tree from a data-stitch associated with the other network circuit.

Claim 25 (original): The network device of claim 24, wherein said processor is further configured to disassociate links of the network device from a VLAN assignment associated with the removed network circuit.

Claim 26 (previously presented): A network device for preventing paths within a telecommunications network from inadvertently being blocked, the network device comprising:

memory;

one or more network interfaces; and

a processor configured to:

remove a network circuit from the network device;

determine that the removed network circuit was assigned a VLAN that is also used by another network circuit; and

remove spanning tree from a data-stitch associated with the other network circuit;

wherein said processor is further configured to determine that the removed network circuit did not have spanning tree run thereon.

Claim 27 (previously presented): A network device for preventing paths within a telecommunications network from inadvertently being blocked, the network device comprising:

memory;

one or more network interfaces; and
a processor configured to:
remove a network circuit from the network device;
determine that the removed network circuit was assigned a VLAN
that is also used by another network circuit, and
remove spanning tree from a data-stitch associated with the other
network circuit;
wherein said processor is further configured to determine that the other
network circuit had spanning tree run thereon.

Claim 28 (previously presented): A network device for preventing paths
within a telecommunications network from inadvertently being blocked, the network
device comprising:

memory;
one or more network interfaces; and
a processor configured to:
remove a network circuit from the network device;
determine that the removed network circuit was assigned a VLAN
that is also used by another network circuit; and
remove spanning tree from a data-stitch associated with the other
network circuit;
wherein said processor is further configured to:
define a new network circuit for the network device;
assign a VLAN for the new network circuit;
determine that the VLAN assigned to the new network circuit was
previously assigned to an existing network circuit; and
run spanning tree on a data-stitch created by the new network circuit.

Claim 29 (original): The network device of claim 28, wherein said processor is further configured to run spanning tree on links of the network device associated with the new network circuit and assigned the VLAN.